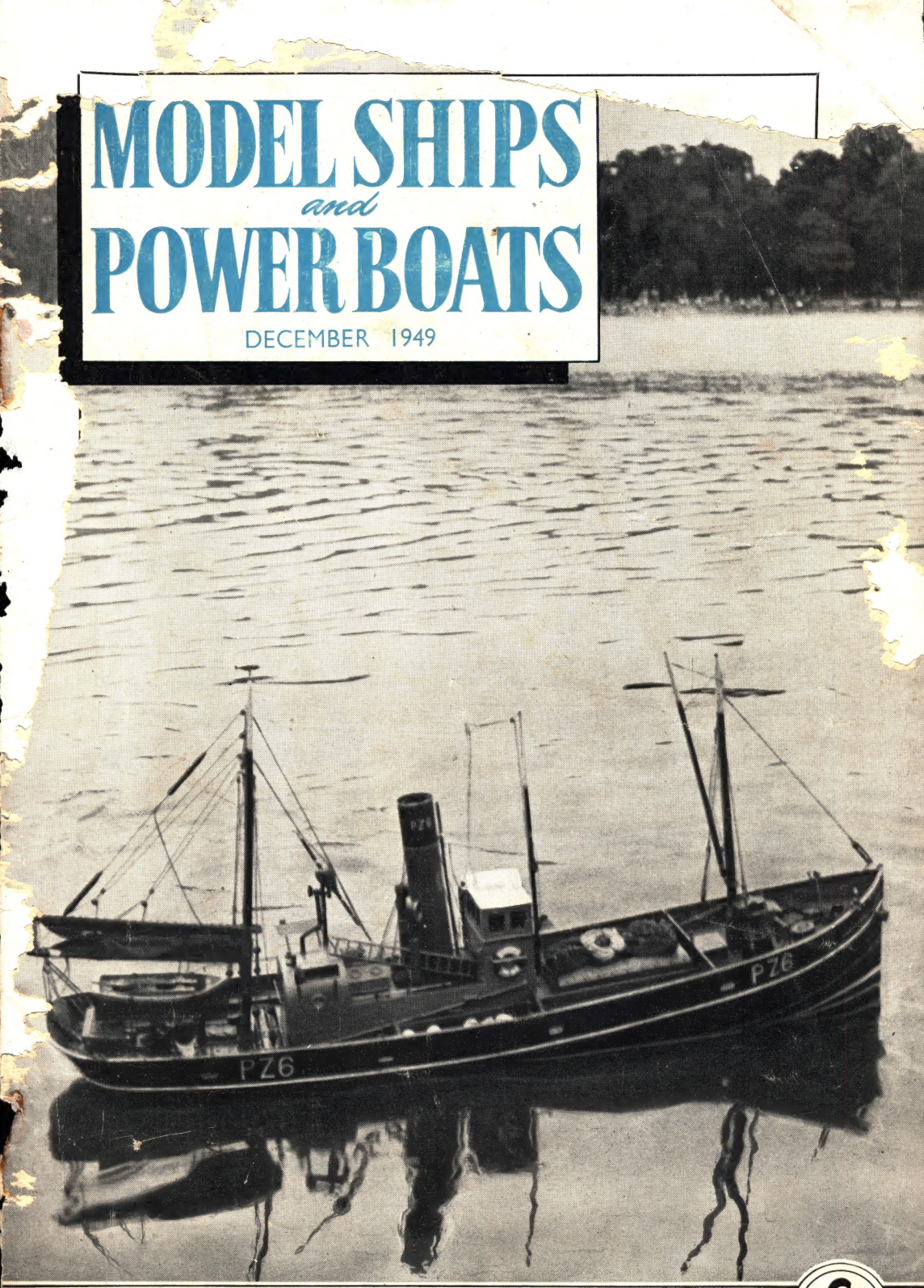
MODEL SHIPS *and* POWER BOATS

DECEMBER 1949



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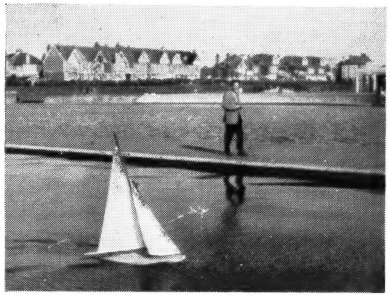

Photograph of the model sailing on Hove Lagoon

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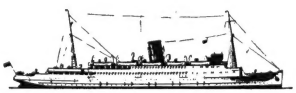

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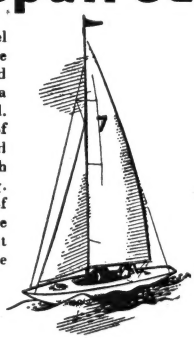

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Model Ships and Power Boats

VOL 2 No 24 DECEMBER 1949

PERCIVAL MARSHALL & CO. LTD. 23 GREAT QUEEN ST. LONDON W.C.2

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The Ship's Log

Greetings

At this season of the year we take the opportunity of wishing all our readers a very Merry Christmas and good modelling and sailing in the coming year. With this, the concluding number of our second volume, we can form some idea of our readers' wishes concerning the future of our magazine. There is a general wish to see it larger, and without exception, our correspondents express a willingness to pay more for it. The circulation has risen very satisfactorily since we were allowed more paper last July. We had hoped to have been allowed still more paper in view of the demand for such a magazine as ours, but the prospects are not at all promising. Under the circumstances we have no choice but to keep it at its present size until conditions improve. We will, however, do our best to ensure that the contents are of the greatest possible help to the ship modeller whatever his interest may be.

Norfolk Wherry Restored

Those who are interested in Mr. Foster's article on the Norfolk Wherry will probably have noticed that the half-derelict and dismantled wherry *Albion* of 40 tons burden was recently restored as near as possible to her original condition. This is due to the interest and enthusiasm of the 300 members of the Norfolk Wherry Trust whose labour and donations have made possible a new lease of life for this veteran representative of these craft so typical of the Norfolk and Suffolk waterways. Her maiden trip was made on October 13th, when she sailed from Gt. Yarmouth to Norwich. The Mayors of Yarmouth and Norwich met at Hardley Cross to greet the vessel and the National Maritime Museum sent a telegram of good wishes. The *Albion* was built in 1898, but with the work now carried out she should be good for another 15 years or more. The aim of the Trust is, however, to build a new wherry as soon as possible while there are still craftsmen left to do it. These vessels were never built from drawings and if the building of a new example is much delayed the last of the old-time shipwrights will have gone, and with them the skill and experience required to build such a vessel. This, together with the activities of the Thames Barge Sailing Club, is a very gratifying tribute to the interest and affection that still exists for the old-time sailing craft.

Our Cover Picture

This month we have used a photograph of the very interesting model of a steam drifter *Carolina*, made by Mr. Maclellan, of the West London P.B. Club, taken at their regatta at the Round Pond, Kensington last summer. Although she carries a Penzance registration number, she is actually a replica of a Lowestoft drifter. Mr. Maclellan went to great lengths to get the details and the superstructure correct and also to get information about the fishing gear, spending a considerable amount of time at Lowestoft for the purpose. In action the model is very seaworthy and has a good turn of speed. She won the Prototype Cup at the Grand Regatta, at Victoria Park, thus repeating her builder's success of last year which was won with a similar model.

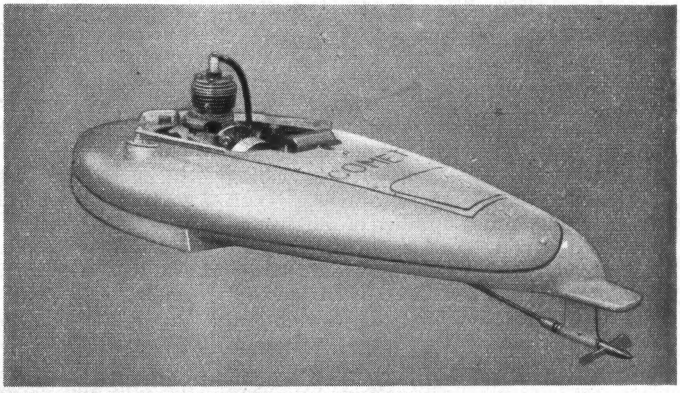
MODEL HYDROPLANE HULLS

Their design and construction

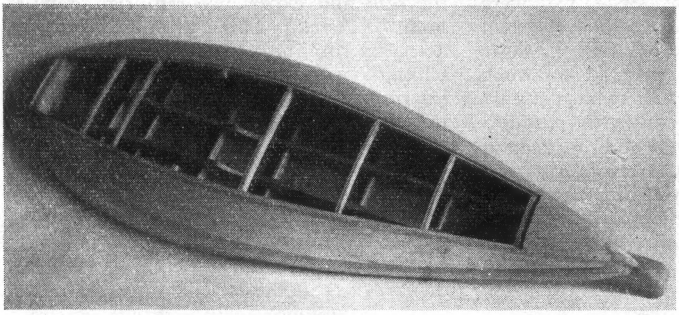
by *Edgar T. Westbury*

THE methods of construction employed for the "M.E." 24-in. hull are applicable to most kinds of craft, possibly with minor variations to suit differences of design. For instance, in the case of hulls having " box " sponsons, the latter may either be made integral with the hull, by extending the width of the frames forward of the step, or by building separate sponsons, by similar methods to those of the main hull and attaching them to the sides, which should be reinforced and have suitable seatings at this point. One advantage of using separate sponsons, or attached planing surfaces of any kind, is that it allows of altering their angles of incidence, or even shifting them bodily fore and aft, without completely rebuilding the hull ; but on the other hand, it is often found extremely difficult to fasten them securely enough to avoid the risk of their becoming loose under heavy buffeting, which may be disastrous. I have seen several boats wrecked through the tearing off of false planes at high speed. This eventuality is, however, more likely when plates or other flat surfaces are attached to the underside of an already completed hull than when the latter is deliberately designed to have separate planes, and the latter can generally be attached more securely to the sides than to the bottom of the hull.

If one decides to build a planked hull, the same methods of framing can be employed as for the 24-in. hull, but there is much more latitude in the shape of the hull, as the planks can be made to conform to compound curves which three-ply sheets could not follow without considerable risk of cockling, either in initial construction or in subsequent use. A planked hull can be made much more " boat-shaped " than one with a three-ply skin, with no sacrifice of essential features in the design of planing surfaces ; and the upper streamlining or rounding-off of deck lines



This hydroplane, built by Mr. A. L. Headech, and powered with a 5 c.c. "Cadet" engine, represents an excellent example of a completely streamlined planed and planked hull.



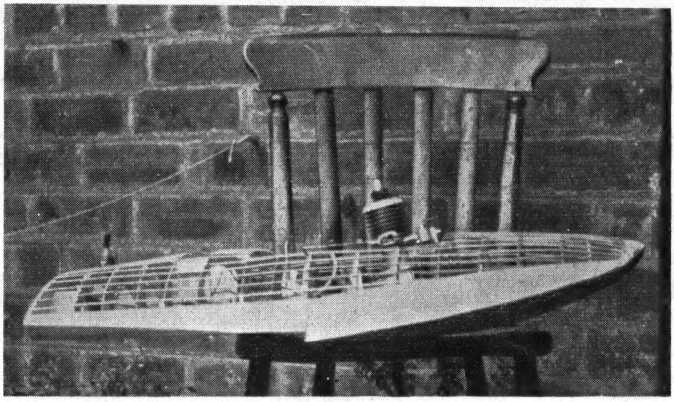
The internal construction of Mr. Headech's hull.

*Continued from November issue, page 172.

is readily carried out. But to plank a hull really neatly demands considerable skill in the fitting of the individual planks, and though one may always resort to "botching," by such methods as stopping the cracks with plastic wood, liberal use of rasp and sandpaper, or by fabric covering, this sort of thing cannot be considered good boatcraft. It is much better to adopt simple methods and carry them out well, than to attempt ambitious methods which are just beyond one's skill and experience.

I have been criticised in one or two quarters for "condemning" the use of balsa wood in hull construction. As a matter of fact I did not condemn it—I simply pointed out its disadvantages, which is a very different thing. One is, of course, due to the availability of engines of phenomenal power output rather than any intrinsic merit of the hull design, and I dare to suggest than some of the hulls of these boats have been badly designed both in respect of inherent stability and lift/drag efficiency. The novice who expects to build a record-breaking boat at his first attempt is—to put it very mildly—a super-optimist, and to me it seems much more important to build a boat which can be practically guaranteed to run at least moderately well, with almost any engine of reasonable performance, than to stake "all or nothing" on a very ambitious, but imperfectly understood design.

Such knowledge as I can lay claim to in hull design—and I am not setting up as an



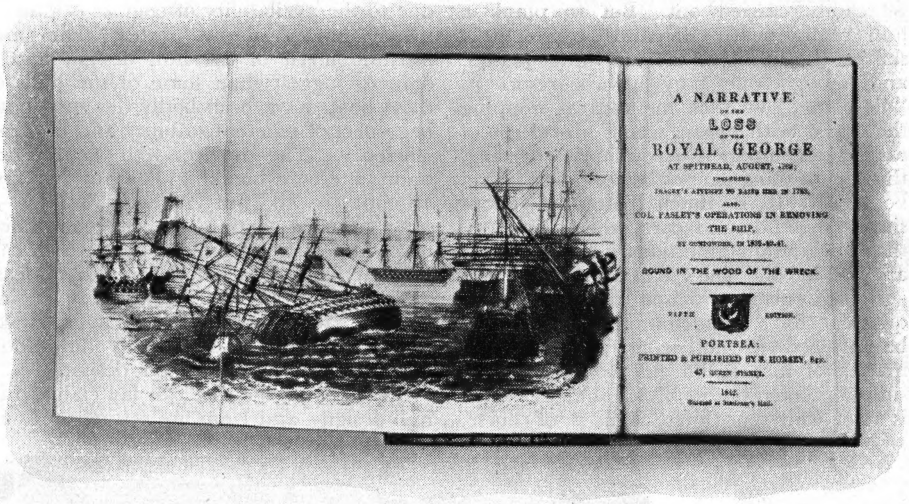
The elaborately framed construction of Col. Bowden's one-time 15 c.c. record holder "Jildi Junior."

free to use any material one thinks fit in the construction of a boat or any other model, but my advice was intended to save constructors the trouble of building hulls which may prove to be insufficiently strong and durable for the arduous conditions of high speed.

It may be objected by some of the more ambitious enthusiasts that I have neglected the modern developments in hull design, especially as the hull which has been described in detail is, judged by some modern standards, out-of-date. In view of the fact that this treatise is intended specially for the benefit of the beginner, who approaches hull design and construction for the first time, I have considered it most important to concentrate primarily on a type of hull which is stable, efficient under moderate power and easily managed, rather than one which is only suitable for super-efficient power plants, and requires considerable skill—not to say luck!—in handling. Many of the spectacular successes with boats in recent years have been

authority on the subject—has been acquired in a very hard school, and I know that the worst disappointments in this pursuit are those of the designer or constructor who attempts too much. Hitching one's waggon to a star is a very fine ideal, but there are many cases where the humble carthorse is a much more satisfactory means of progress. It is a fallacy, all too common in competitive models, to follow like sheep the methods, principles or designs of those who have attained some brief success. I do not recognise the claim of anyone to pose as an authority on hull design, on the strength of having made *one* boat which goes fast—but show me the man who has made a number of boats, each successive one of which has shown a steady improvement on its predecessor, and I will admit that he knows *something*—not necessarily everything—about design. And let me make it quite clear that no personal innuendos are contained in these comments.

(*Continued on page* 181)



ECHOES FROM THE PAST No. 3

The Loss of the *ROYAL GEORGE*

by M. WOODROW

A VERY interesting relic was shown to us the other day by Mr. V. O. Lawson, chairman of the S.W. London Ship Model Society. It was a small book describing the loss of the *Royal George* at Spithead in 1782. As will be seen from our illustrations the book is bound in oak covers which were made from timbers recovered from the wreck. In the centre of the cover is a plug which was made from the copper fastenings of the ship.

The *Royal George*, built at Woolwich in 1756, was the oldest first rate in the service. In August, 1782, she had just returned to Spithead where Lord Howe's fleet lay at anchor, but had made so much water that it was ordered that she be taken into dock. However, the leak was discovered and the docking dispensed with.

During the washing of her decks, the carpenter discovered that the pipe which admitted water to clean the ship needed replacing, and to do this it was necessary to heel the ship to one side. This was effected by running-out the guns on the larboard side and drawing in those on the starboard side, which brought her port-hole sills nearly even with the water. As the ship lay in this position, a lighter bringing rum came on the low side to unload. The weight of the rum added to that of the men working on board caused her to heel over more than was intended, and water began to enter the hold with every wave. Despite the carpenter's repeated requests that the ship be righted as she was in peril, the work was continued, until, with a sudden breeze, the ship heeled still further and water flowed in her lower ports. Order was then given to right ship, but was too late. In a minute or so the scene was chaotic. Nearly 1,200 people, including many women and children visiting the ship, were seen to climb up the rigging and flounder in the water. A few were saved by the ships moored nearby, but the ship sank quickly to the bottom and only those able to swim in the swirling water could be picked up. Such a disaster could not have been imagined—a ship, anchored in smooth water, suddenly becoming a terrible wreck and causing so many to perish.

Attempts were made in 1782 by Mr. Tracey, who lived in Portsea, to raise the *Royal George* by means of a cradle slung under the hull of the wreck, and with cables attached to lighters moored overhead. As the tide rose, the wreck would be lifted off the bottom. Many determined efforts were made, but various factors hindered the operations, which were finally abandoned in the summer of 1784. For more than half a century the wreck lay submerged,

and was a constant danger to other ships. During this time other attempts were made to raise her, but were equally unsuccessful. In 1839 Col. Pasley submitted a plan to dismember the hulk by gunpowder, an operation which proved extremely effective. Much was salvaged from the old ship, and despite the length of time she had been submerged, many relics were raised. It is fitting, therefore, that this graphic story should be recorded in book form between covers made from part of the recovered timbers. To recall Cowper's poem :—

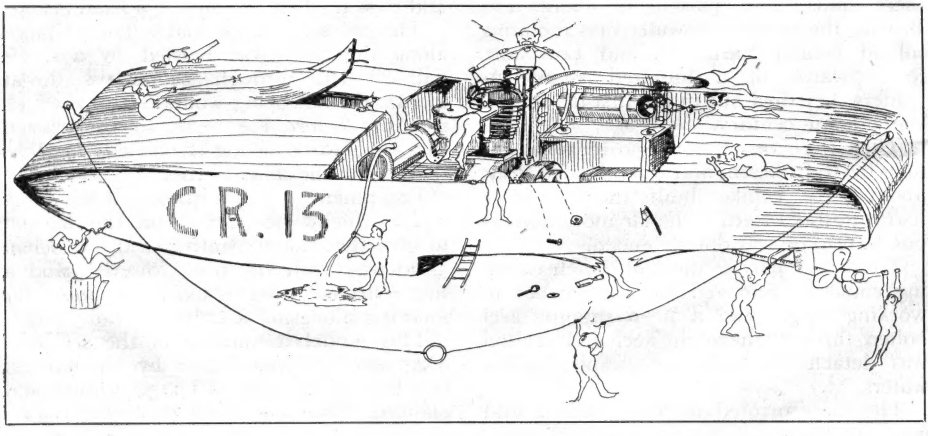
" *Toll for the brave* !
The brave that are no more !
All sunk beneath the wave,
Fast by their native shore ! "

MODEL HYDROPLANE HULLS

(*Continued from page* 179)

Danger—Gremlins at Work !

On the principle that a " a little nonsense now and then is relished by the wisest men," I make no apology for ending this treatise with a little light comedy. The cartoon reproduced here was drawn by a member of the Croydon S.M.E., and will no doubt shed a good deal of light on many occurrences at the pond-side which have hitherto been " wrapt in mystery." Those of us with experience in this game know only too well that boats often develop the most unexpected and unprecedented proclivities for trouble on regatta days ; engines of brilliant performance and unimpeachable habits suddenly become sulky or erratic—batteries suffer from rapid consumption, coils spark anywhere except at the sparking plug, leads fall off or break—propellers fall off despite lock-nuts and spring washers, or shafts of high-tensile steel acquire the physical properties of macaroni—not to mention all the things that can happen to the hull ! Even the least credulous can hardly doubt that there must be evil influences at work ; and our cartoonist's facile imagination—and equally facile pen—has made these " influences " visible to the naked eye. It seems that this revelation will call for an entirely new line of research work—we must, without delay, set to work on the development of an anti-Gremlin spray !



L. H. FOSTER writes the fifth of a series of articles on *OLD-TIME COASTAL CRAFT*

THE NORFOLK WHERRY

THE Norfolk Wherry, which superseded the earlier keel, carried general merchandise and passengers about The Broads, the network of waterways radiating inland behind Yarmouth and Lowestoft, for upwards of a hundred years. As traders they died out in the first decades of the present century.

They were vessels some 50 ft. to 60 ft., long by 16 ft. beam, and when loaded drew about 6 ft. Clinker built, the Bure type had a transom stern ; the far more numerous Yare type was double ended.

The upper part of the high hatch coaming could be removed for convenience in working cargo, and a deep slipping keel bolted through the main keel and keelson was detachable when navigating shallow waters.

The mast pivoted in a tabernacle and had a heavy lead counterbalance on its heel, so that one man could easily lower and raise it when negotiating a fixed bridge.

The one sail (which had a bonnet laced along the foot) was hoisted by a single halliard led through peak and throat blocks, the fall being wound on to a winch standing before the mast, so constructed that it could be swung to one side to allow the heel of the mast to rise.

Equipment included quants, a dropping chain which was trailed on the bottom to give the rudder control of the vessel in a tideway with the mast lowered, and a single armed rond hook, or anchor, for mooring alongside a bank.

This model is another of the series of disappearing types made by the writer. It is built to the scale of 1 : 38, framed and planked.

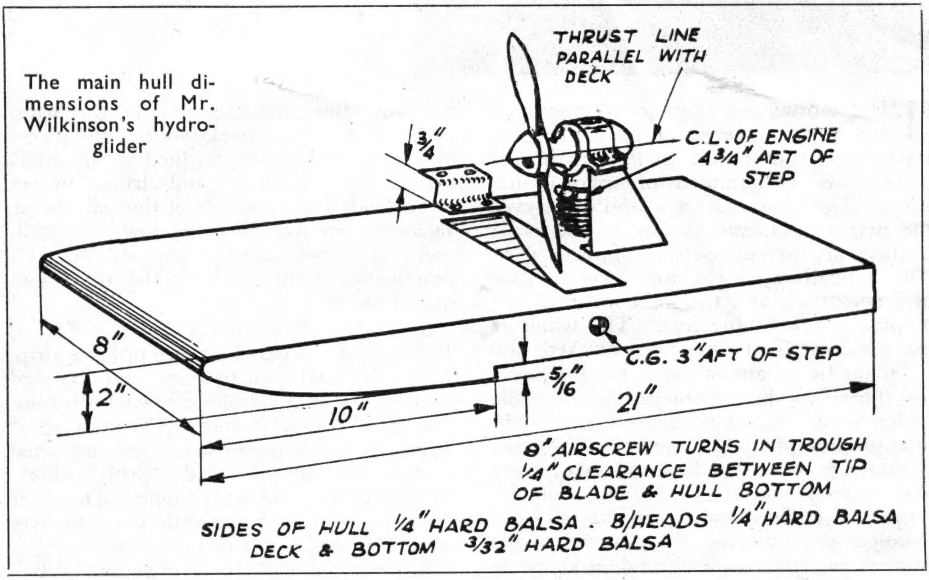
IN DEFENCE OF THE HYDROGLIDER

by EDGAR T. WESTBURY

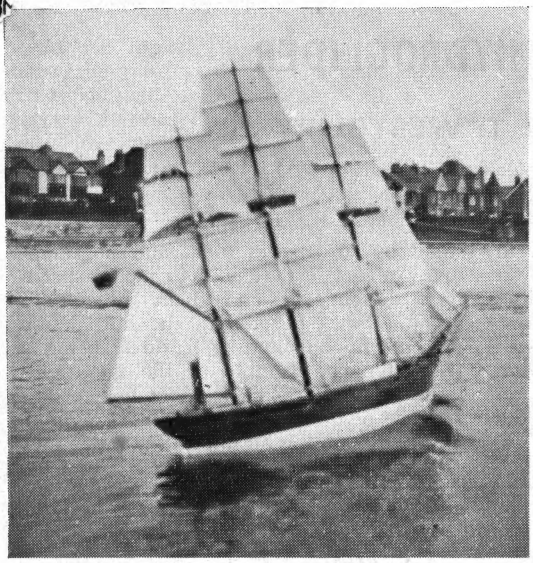
MY comments on airscrew-propelled hydroplanes, or "hydrogliders," in the July, 1949 issue, have prompted a number of replies from readers, including one from Mr. W. Wilkinson, of Glasgow, who reports some very good results with the craft shown in the accompanying drawing. This was built purely as an experiment, and with no idea as to the results which might be expected. It is, however, stated that when powered with a Mills c.i. engine of 1.3 c.c., it attained a speed of slightly over 20 m.p.h. on a line giving a lap distance of 50 yd., with good stability and clean running, none of the troubles described in my above-mentioned comments having been encountered. An E.D. Mk. III 2 c.c. engine was then tried out in the same hull, the increased power allowing of running on a 100 yd. lap, and resulting in further speed, without impairing stability. Still more power was then applied by fitting an Ohlsson "23" glow-plug engine with a 9 in. diameter by 6 in. pitch airscrew, and in the latest trials, a speed of 33 m.p.h. was obtained, still without any sign of instability.

The results recorded by Mr. Wilkinson are certainly remarkable in view of the small power engines used, and no doubt many readers experienced in model speed-boat design will find them difficult to account for, especially as the hull design presents no outstanding features, being a fairly typical example of the good old-fashioned "scow" or "kipper box." The absence of underwater drag, as I pointed out in my notes, is an important asset to the efficiency of the airscrew-driven type of boat, and it is evident that the power weight efficiency of the craft is high, though the total weight is not stated. It will be seen that the centre of gravity is kept well aft, which undoubtedly helps the craft to avoid digging its nose in when accelerating, but one generally encounters some instability at high speed in a very light craft with such a large surface area, and low forward weight. Some boats have been found to improve in stability at high speed by moving the weight farther forward, or reducing forward hull area; present tendencies with underwater propulsion favour adjustment of the hull so that it is definitely nose-heavy in static trim.

(*Continued on page* 190)


THRUST LINE PARALLEL WITH DECK
C.L. OF ENGINE 4 3/4" AFT OF STEP
3/4"
8"
2"
10"
5/16"
21"
C.G. 3" AFT OF STEP
9" AIRSCREW TURNS IN TROUGH
1/4" CLEARANCE BETWEEN TIP OF BLADE & HULL BOTTOM
SIDES OF HULL 1/4" HARD BALSA . B/HEADS 1/4" HARD BALSA
DECK & BOTTOM 3/32" HARD BALSA

The main hull dimensions of Mr. Wilkinson's hydroglider



★ ENCHANTRESS

a sailing model clipper by

G. F. MURRAY BUTCHER

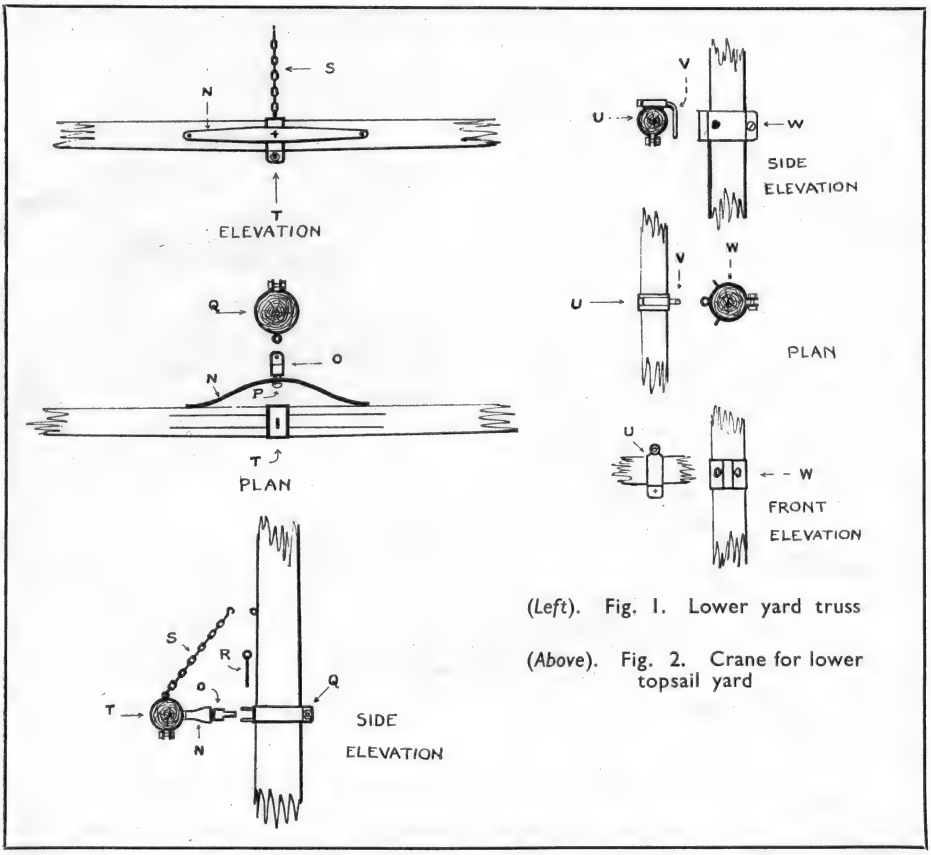
THE bobstay is a length of stainless steel rod, while the bowsprit shrouds and the lower stays and shrouds at fore, main and mizzen are of stranded phosphor-bronze wire. The topmast stays and backstays, the martingales, and the inner and outer jibstays are of single-strand bronze wire. The topgallant, royal and skysail stays and backstays, and the jibboom guys, are of plaited silk fishing line. The whole of the standing rigging has been blacked, and is set up by means of small black bowsies on short lengths of black fishing silk, which hook into chain plates or eyebolts at appropriate points on the hull. Following standard practice, the fore and main lower and topmast stays are double, but the remainder of the standing rigging has been drastically "thinned-out." Instead of the proper multiplicity of shrouds and backstays, there is only one lower shroud aside, in the position where the aftermost swifter would come, one topmast backstay, one topgallant backstay, and so on to each mast. As the topmast shrouds would not serve any useful purpose in a small model, they have been omitted, together with the "tops." The topmast crosstrees and topgallant shrouds have also been left out, but since it was felt that the spreaders at the topmast-heads, for the topgallant and royal backstays, would be of value, these have been reproduced in the model. These spreaders, and the dolphin-striker, which is of orthodox design, are of hard german-silver rod, $\frac{1}{16}$ in. and 3/32 in. diameter respectively.

The yards are of normal form, octagonal in section at the slings and tapering to half the sling diameter at the yardarms. In place of proper cheek-blocks, little pieces of hardwood have been glued to the after-side at the yardarms, and drilled to act as fairleads for the sheets of the sail above. Jackstays are provided on lower, topsail, and topgallant yards, but it was not practicable to fit them to the royal and skysail yards.

The lower yard truss is shown in Fig. 1. This fitting consists of a piece of brass strip, "N," filed and bent to shape and attached to the yard by a couple of escutcheon pins. The part "O" is formed from a short length of $\frac{1}{8}$-in. square brass rod, attached to "N" by the pivot "P" (which allows movement in a vertical plane). The after part of "O" engages with the two eyes on the foreside of the truss band "Q", and turns on the removable pin "R." The weight of the yard and the downpull of the topsail sheets are taken by the sling chain "S," which is permanently attached to the sling hoop "T," and hooks on to the foreside of the mast.

The lower topsail yards have a simple type of crane which is shown in Fig. 2. The hoop "U" is bolted around the middle of the yard. On the top of this hoop is soldered a short length of $\frac{1}{16}$-in. bore brass tube, in which fits a piece of rod "V," bent through a right-angle, and retained by a nut on its forward end. The vertical end of this rod can be inserted in another short length of $\frac{1}{16}$-in. bore tube soldered to the foreside of the mastband "W", which is fitted at the height where the lower cap would normally come. The upper end of the lower lifts (which are adjustable

*Continued from November issue, page 169



(*Left*). Fig. 1. Lower yard truss

(*Above*). Fig. 2. Crane for lower topsail yard

with bowsies) hook into the eyes on each side of this mast band. The upper topsail yards have sling hoops with a small eye on top for the tye, and another eye on the afterside, which engages with two other eyes on a metal parrel around the topmast, a vertical pin holding the two together. The upper yards have wooden chocks glued to the afterside, and although the usual hinged half-hoops to embrace the masts have been omitted, the pull of the halyards holds them into the masts quite satisfactorily. The tyes of the topsail and topgallant halyards are of chain, with falls of flax or silk line, adjustable by small flat bowsies.

Most of the working sails are of union silk, while the skysail, small staysails and the stunsails are of a lighter material. Because of their small size, a clumsy appearance would have resulted from taping the edges, model-yacht fashion, and even an ordinary double hem would have given too heavy an appearance, so they have been made by turning the edges in once only and sticking them down with " Durofix," sparingly applied. A thread of thin silk fishing line glued into the fold does the work of a bolt-rope in a full-sized sail—taking the strain off the canvas and preventing those sides cut on the bias from stretching out of shape. The construction of real sails has been suggested by ruling in, using sepia waterproof ink, lines representing the " cloths " making up the sails, together with the usual linings, bands and strengthening pieces. This, incidentally, has had an unexpected result, as many pondside spectators declare that the sails are made of paper, presumably because of a resemblance to ruled foolscap !

The topsails and topgallantsails are permanently bent to the jackstays on their yards, and when the sail has to be taken in, the yard comes off as well. The lower yards, however, are needed in any case to spread the clews of the lower topsails, so the fore and main courses are taken in by unhooking them from their yards.

As a substitute for proper sheaved cheek-

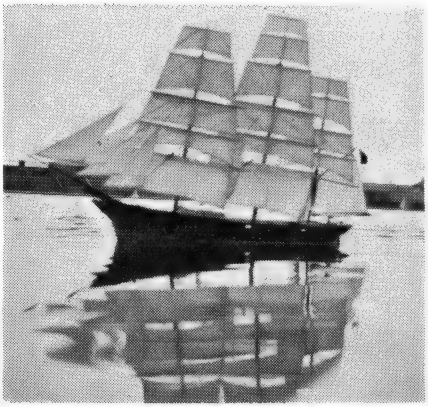
blocks for topsail, topgallant and royal sheets, the lower yards, upper-topsail yards and topgallant yards are fitted with small pieces of hardwood (X) glued to the after side at the yardarms. A suitable size hole is drilled vertically through each block towards its outer end. See Fig. 3.

The royal sheets lead through blocks on the topgallant yards and are adjustable by a couple of small bowsies under the latter yard. The topgallant sheets are similarly fitted.

The topsail sheets, however, after passing through the blocks on the lower yardarms, run inwards and pass through a wire fairlead hanging from the clamping bolt of the sling hoop (a simple substitute for a " butterfly " block) and then lead down to a band around the lower mast near the deck. The reason for this difference from the arrangement of the upper sheets is that the tension on the topsail sheets brings a proper strain on the lower yard sling and resists the tendency of the topsail halyards to pull the lower yard upwards.

A series of small hooks, up the luff of each jib and staysail, serves to attach it to its stay, and a halyard, adjustable with a bowsie, hooks into the collar of the stay concerned. The spanker, which is spread by the usual boom and standing gaff, hooks on at the throat, has a bowsie adjustment at the tack, and adjustable outhauls are hooked on at the peak and clew. The angle of the boom is controlled by a simple double-ended sheet, and a light elastic guy is used to hold the boom to leeward clear of the vane steering gear.

The fore lower braces are the only ones which resemble their full-size counterparts.



Each of these passes through a fairlead on either side abreast of the mainmast and is attached to a round bowsie sliding on a jackline on top of the bulwarks. The main and crossjack yards are linked to the fore-yard, the fore upper-topsail braces lead to the main yardarms, and the main and mizzen topsail yards are linked to the fore topsail yard. It has not been necessary to fit topgallant or royal braces. Movement of the two round bowsies controlling the fore braces allows all the yards to be swung together and trimmed to the desired angle. As a concession to realism and to take advantage of the lifting effect of a loose footed course, booms have not been fitted to these sails. Instead, the clews are hooked to flat bowsies of special design which slide on lines combining the functions of the sheets and tacks of a real ship.

Each of the headsails has a pair of sheets, one to starboard and one to port, but instead of their being belayed separately, they are brought together and controlled by a single round bowsie on each side, so speeding up the operation of " going about." Incidentally, these round bowsies are a bare 0.2 in. diameter, so they are scarcely noticeable a few feet away.

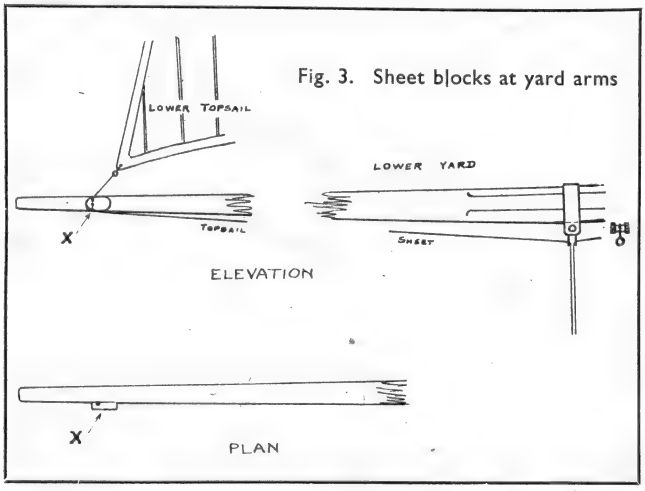
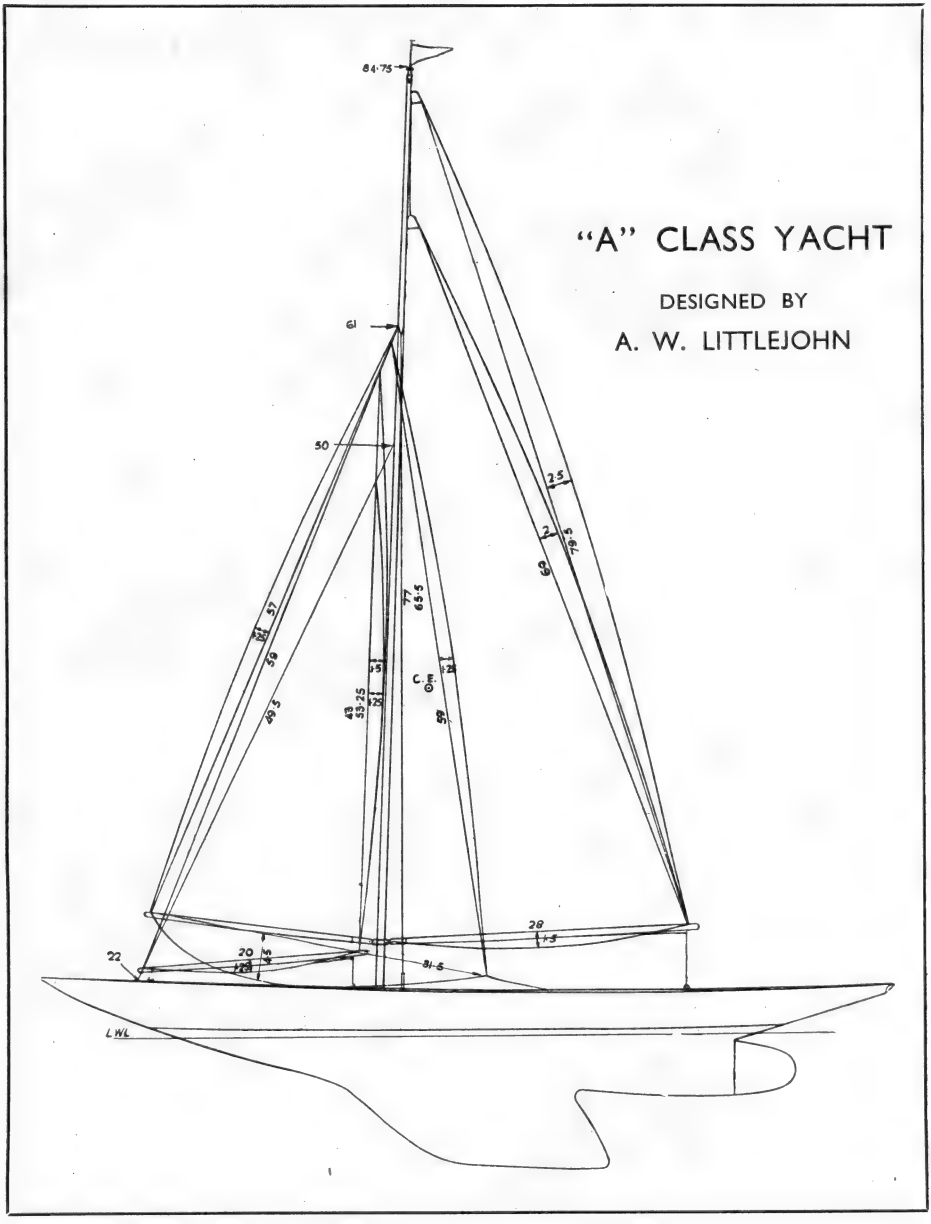


Fig. 3. Sheet blocks at yard arms

(The concluding instalment of this article, which will be published in our January issue, will contain an illustrated account of the Vane steering gear adopted by the author for his model.)



The "A" Class design reproduced above is from the new drawing received recently from Mr. A. W. Littlejohn. The remainder of the sheet contains sheer plan and waterline plan drawn half-size and a body plan drawn full-size. The sections can, therefore, be copied direct by the builder. The design shows a model with easy lines and round bilges and will produce a very efficient boat which should give a good account of itself in racing. It embodies Mr. Littlejohn's wide experience and has all the latest features of its class. Black line prints may be obtained from this office, price 10s. 6d. net. This design is one of a series issued by Percival Marshall, who will be pleased to send, on request, a free list of available plans.

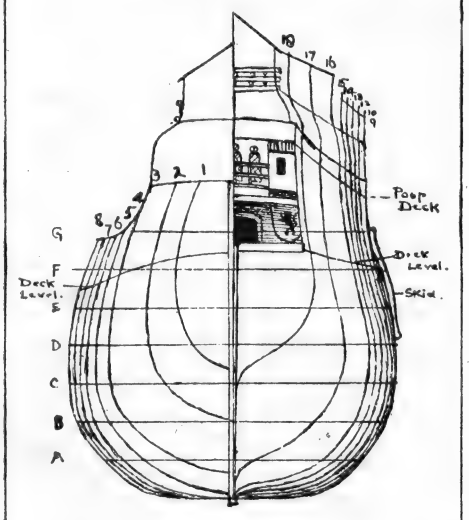
A Model Flemish Carrack

by C. M. MILLWARD

THE interest of the Carrack whose details are set out here lies in the insight it gives into the evolutionary stages of ship design and construction. It dates approximately from the period 1470-80, and is taken in all its main points from an old print by a Flemish artist "W.A.", who flourished at that period, and from an excellent model built from this print by Mr. Morton Nance and at present in the Science Museum, South Kensington. The print in question shows every sign of having been taken from a model, probably a votive model in some church, and is very full of detail.

The hull is very deep and round, as befitted a merchant ship. The basis of the hull is best constructed on the "bread-and butter" system, with laminated planks. On the Sheer Plan (Fig. 2) I have marked sections, and these are drawn out in the Body Plan (Fig. 1). From these sections the Waterlines Plan (Fig. 3) has been drawn, the spacing of the waterlines being shown on the Body Plan. These waterlines must be used in shaping the planks; on all planks from *D* downward the waterline forms the upper shape; above the lower side of the plank is shaped to the waterline, to allow for the "tumble-home" of the topsides. Having sawn out the planks they should be screwed together and the whole then shaped, using templates taken from the Sectional Plan.

Fig. 1. Body plan

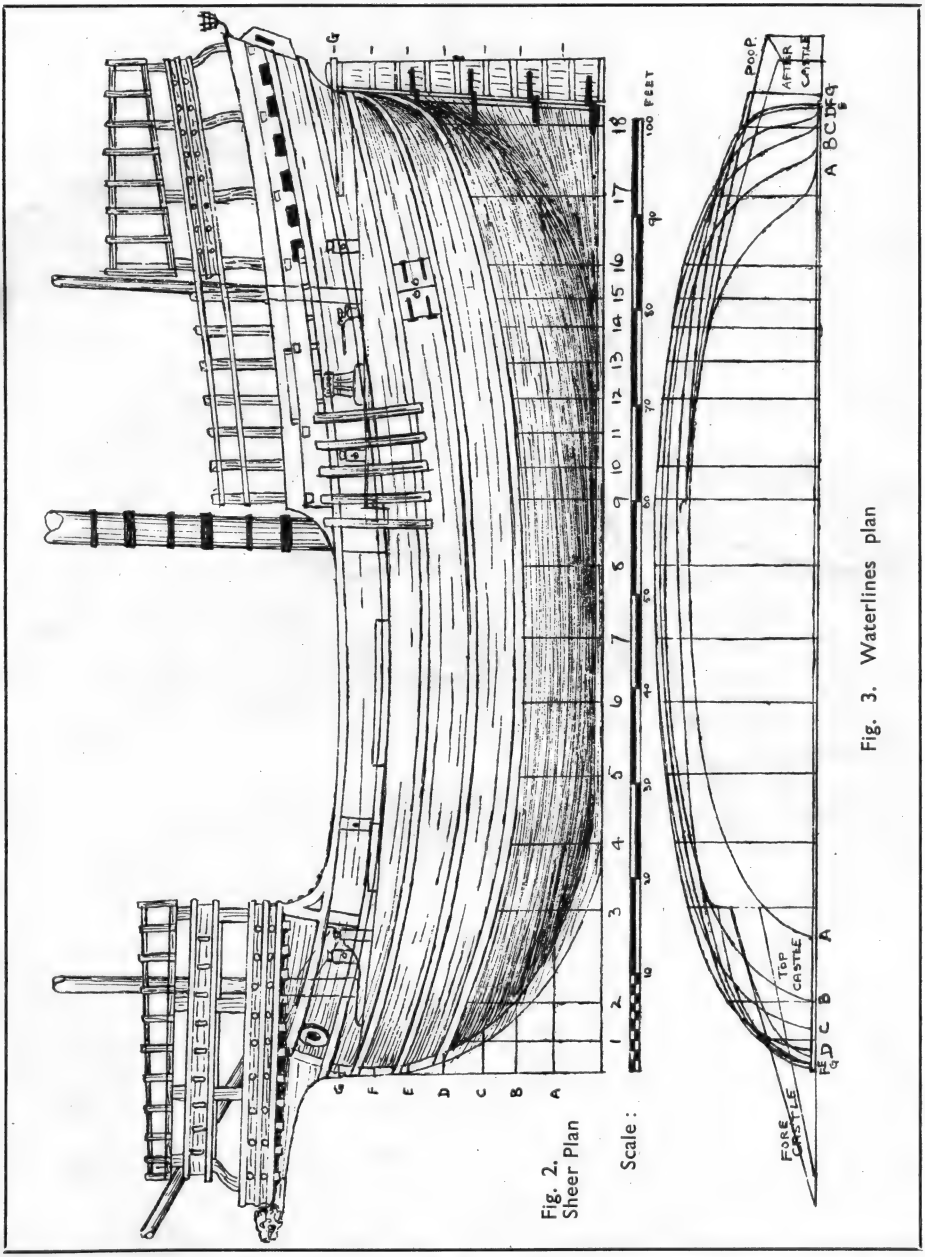


Now, the main deck of this ship, as can be seen from the Sheer Plan, is at the level of the middle wale at the stem, amidships level with the lower edge of the wale above; then at Section 9 the deck steps up—to bring the capstan in line with the hawsers—and finishes again level with the middle wale. The best method of hull construction to suit this design is, therefore, to carve the hull from the solid up to the level of the main deck, and then to build up the rest of the topsides on timbers. In the Body Plan is shown the main deck level, and the timbers are carried up to their full height. In this way the stanchions supporting the "castles" are firmly fixed, being continuations of the lower timbers.

Having carved the hull to the deck level, the keel, stem and sternpost should be pinned on. The stem fits back on to the deck to provide a foundation for the butts of the planking of the topsides, and on each side is pinned a frame—the "knightheads"—as thick as the stem itself and shaped as the stem. The hull should be rabbetted to the depth of the planking—about 8 in. on the scale—following the run of the middle wale, and the knightheads are set to fit flush with these rabbets; see Fig. 5. The "Knee of the Head" which supports the Forecastle should also be pinned on now.

The main deck is then lined with a hard pencil, and all knights, bitts, hatches and other fittings put on. The positions of these fittings are set out, together with some idea of the fittings themselves, in Fig. 4—the Deck Plan. The small forward hatch heads to the Cable Stowage; a hole should be drilled beneath each corner, to take the ends of the cables, to fake the leads below. The dimensions of all fittings can be obtained from the Deck Plan and also from the profiles shown on the Sheer Plan.

The timbers should next be fitted. These are mortised into the deck, and held by a pin driven from outside through hull and timber-end. "Shelves" are then pinned on the insides of the timbers to take the



ends of the deck beams. Thus a shelf should be run round just below the heads of the timbers at the waist, from forward right aft, to stiffen the timbers. Another ties the timber heads from Section 3 forward, sufficiently below the actual heads of the timbers to allow the beams to lie as shown. On the poop the position of the beam ends is shown, with the poop deck level ; these beams do not project through the ship's side, as do those of the forecastle. A shelf must be run round for these beams to rest upon. In the bow the shelves from either side butt against each other across the stem, and a piece of wood should be shaped to fit across this butt, to stiffen the bows. This is known as a " breast hook."

(To be continued)

For the Bookshelf

MODERN SHIPS. By F. E. DEAN. *Temple Press Limited, London.* 8*s.* 6*d.*

This is a recent addition to the Boys' Power and Speed Library, but it should not therefore be classed as a boy's book. The fundamental problems encountered in the planning and design of the ship are described in brief but lucid language, as is also the actual building of the ship. Following this comes a very interesting section dealing with the power plant and auxiliaries, the development from the early steam engines to the latest diesels being fully described. The remainder of the book is devoted to a discussion on the various types of ships from the largest liners to the smallest special purpose ships. The book will repay careful study by anyone interested in ships and the model-maker who specialises in power-driven models of prototype steamships will find it a great source of inspiration. The illustrations are well chosen and contain examples of all types of ships and a few photos of interesting details. A number of very clear line drawings are included, our only criticism being that in some cases the captions are omitted ; although the section of an engine may be referred to in the text it is nice to have a caption under it saying which particular type of engine it is. The book is bound in cloth and is well produced and is extremely good value at its price.

MERCHANT SHIPS 1949-50. Edited by E. C. TALBOT-BOOTH. *Samson Low, Marston & Co. Ltd., London.* £1 11*s.* 6*d.*

In addition to its being a valuable book of reference to anyone engaged in the shipping or ship-building industries, this book will be found to be of the greatest interest and value to ship modellers and to all who love ships for their own sake. It contains nearly 2,000 outline drawings of merchant ships of all types arranged according to the system of identification advocated by the author and adopted by the British Admiralty during the recent war. This system is fully explained by detail sketches. Some 450 photos of ships, giving examples of each type are included, as is also a very comprehensive list of the shipping companies of the world with funnel markings, house flags, and other useful particulars. A series of nearly 300 representative drawings of the principal types of merchant vessels (to a scale of 150 ft. to 1 in.) is a valuable feature for the model-maker. An addenda to May, 1949, a list of ships building and of ships lost during the war, and a very comprehensive index add greatly to the usefulness of the book. Strongly bound in cloth and with its page size of 12 in. × 10 in., the book makes a handsome addition to one's library.

IN DEFENCE OF THE HYDROGLIDER (*Contd. from page* 183)

I do not dispute the facts stated by Mr. Wilkinson, but I find it difficult to derive any logical inferences from them, and my statement that I have never personally witnessed any high performances from this type of craft still holds good. Mr. Wilkinson freely admits that he has been lucky with this boat, and does not rule out the possibility of encountering trouble with future models ; he further agrees that this type of craft is " a lazy man's boat," but quite good fun for those who derive pleasure from the running of fast craft, but have not the facilities for the construction of the orthodox type of hydroplane with all its mechanical appurtenances. I have no quarrel with this attitude, neither would I discourage research in any form of craft, whether for racing purposes of otherwise, and I shall be very interested to have any further reports of experiences with hydrogliders, including *actual* (not merely " estimated "—or " guesstimated ") speeds obtained with them.

News from the Clubs

MODEL YACHTING ASSOCIATION

National 6 metre Championship. Fleetwood, September 24th and 25th

Throughout the race, in which there were 18 starters, 15 from seven Scottish clubs, two from Fleetwood and one from Nottingham, light and variable breezes prevailed, and, therefore, the last three heats could not be completed. Despite these conditions, however, there was a very good fellowship amongst the competitors, and the Scots went home in good spirits carrying the cup with them. Top scores were : 1st, N. Rodrick's *Violet*, 60 points (West of Scotland) ; 2nd, D. Leggat's *Jess*, 52 points, (Scottish A) ; and 3rd, J. Phillip's *Glennan*, 47 points (Saltcoats) and 4th, A. Wright's *Red Rose*, with a score of 42 points (Fleetwood).

M.Y.A. National 36-in. Championship, Hove, September 24th and 25th

This event was favoured with fine weather and with good sailing breezes. There were 20 starters from ten clubs, some from as far as Newcastle - on - Tyne and Birmingham. Scoring was 2.2 throughout, with Mann's *Cheeko* 1st, with 52 points (S. London) ; 2nd, Levison's *Sabrina II*, with 52 points (Guildford) ; 3rd, Judson's *Permuda II*, 50 points (Guildford) ; 4th, Adams's *Donald Duck III*, 46 points, and Tansley's *Skylark*, 46 points.

The race was remarkable for its close scoring, a tie for first place, another for fourth, and no fewer than five other ties which were left unsolved. Surely a record for a Championship race !

On Saturday about 50 gathered to a dinner at the lakeside cafe, the occasion being honoured by the presence of the Mayor of Hove, who is the club's president — a position held by each successive Mayor for the past 21 years or more. In his speech, the Mayor referred to model yacht racing " as one of Hove's valued amenities." Prize-giving was held on Sunday, at which a deputy Mayor, Alderman Capt. Andrews, Alderman Mrs. Cushman, a club vice-president, and Alderman F. W. A. Cushman were present and spoke. The commodore, Mr. F. C. Tansley, paid a tribute to the National Model Yachting Association for its support in finance and organisation on the occasion, and an inspiring and informative address was given by Mr. C. R. Seabrooke, general racing secretary of the M.Y.A.

M. Jean-Louis Chevrot with his speed boat.

The Robertson " International " Cup

The race for this well-known trophy was held under the auspices of the West of Scotland M.Y.C., at Dennistoun, Glasgow, on August 6th, and attracted entries from ten clubs. After completion of a double round, the home boat was clearly the winner. Final scores were : 1st, Johnston's *Glen Helen*, 73 points (Dennistoun), with McMillan's *Saramac* (Paisley) and Porter's *Adapta* (Scottish A) tying for 2nd place with 65 points.

Blair Memorial Cup

Racing for this trophy was held at Saltcoats with 18 6-metre boats from 11 Scottish clubs. Wind was light and variable. *Saramac* (McMillan, Paisley M.Y.C.) was undoubtedly a worthy winner and led by 16 clear points. Rodrick's *Violet*, which has held 1st place in this event for three years, dropped to second place with 35 points, after a final with Leggat's *Jess* from the Scottish " A.' class club.

BOURNVILLE M.Y. & P.B. CLUB

6 Metre Class Open Event for the Bournville Cup

A good entry of ships sailed in this end-of-the-season fixture, held on October 8th and 15th. Light, variable breezes on the 8th caused erratic courses, but a strong S.S.W. wind provide good competition on the 15th.

After each boat had sailed against nine different opponents, the highest number of points was gained by George Leeds's *Ethel* (Bournville) ; it was a popular win and rewarded her skipper's unstinted efforts. Second place was worthily achieved by Mark Fairbrother's *Osprey* (Bournville). A very close third—only one point behind *Osprey*—was S. C. Lanford's *Dirrie*, with Allan Davis's *Dare* only another point behind. Final scores were : G. Leed's *Ethel*, 35 points ; 2nd, M. Fairbrother's *Osprey*, 30 points ; 3rd, S. C. Langford's *Dorrie* (City of Birmingham), 29 points.

Annual Open Event for the Mr. and Mrs. W. H Davey Silver Vase

" A " class yachts raced for this trophy on October 1st with light and variable winds for all but one heat. Similar weather conditions have been experienced during much of the present racing season, which has defeated any intentions of tactical effort. The last heat in this event was certainly sailed in " A " class weather, a satisfactory conclusion being formed by S. C. Langford's *Wivey*, which he built himself to the design of Mr. Davey, donor of the trophy. *Wivey* has proved to be a speedy craft, excellent in all respects. Final scores were : 1st, S. C. Langford's *Wivey* (City of Birmingham), 22 points ; 2nd, W. H. Ray's *Concord* (Bournville), 15 points ; and 3rd, G. Leeds's *Elene* (Bournville), 13 points.

THE THAMES SHIP-LOVERS AND S.M.S.

Members and any interested readers are advised that the talk to be given on " The Development of the Warship since Trafalgar." will be on December 7th, on board the *Wellington*. It has been made possible by the kindness of Mr. Frank G. G. Carr, director of the National Maritime Museum, and will be given in two parts—Mr. George P. B. Naish, assistant director of the National Maritime Museum will describes developments from Trafalgar until the end of the day, of the sailing navy, and Mr. E. S. Gibbons, of the Department of Naval Constructors in the Royal Naval College, Greenwich, will then carry the story from then onwards.

Further suggestions for excursions in the summer season, 1950, will be welcomed by the Hon. Secretary, H. V. Evans, of 134, Sunningfields Road, Hendon, N.W.4.

SPEED BOAT RECORDS

In our Log last month we referred to the " International " Speed Boat Record. This was, of course, the record put up by Mr. B. Miles in attaining a speed of 53.85 m.p.h., the highest speed ever recorded in that event. Since that time, however, Mr. G. Stone, of the Malden club, at a regatta held at Geneva on August 21st attained a speed of 70.8 m.p.h. with his twin-hulled boat *Lady Babs II*, powered by a 10 c.c. engine. On October 8th the Model Racer Club, of Geneva, set out to beat Mr. Stone's record. As the new boat built by the president of the club, M. Jean-Loius Chevrot, seemed to be the fastest on the Continent, this was used. During the preliminary trials the boat ran at 78.12 m.p.h. for the half-kilometer without leaving the surface of the water. When the electro-magnetic timing gear was installed the official run was made, giving a speed of 74.34 m.p.h.

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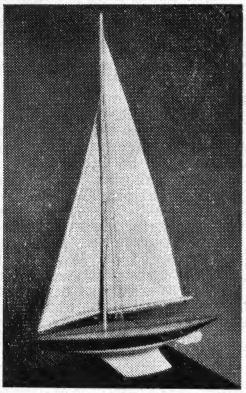

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All correspondence relating to sales of the paper should be addressed to THE SALES MANAGER and correspondence relating to display advertisements to THE ADVERTISEMENT MANAGER.

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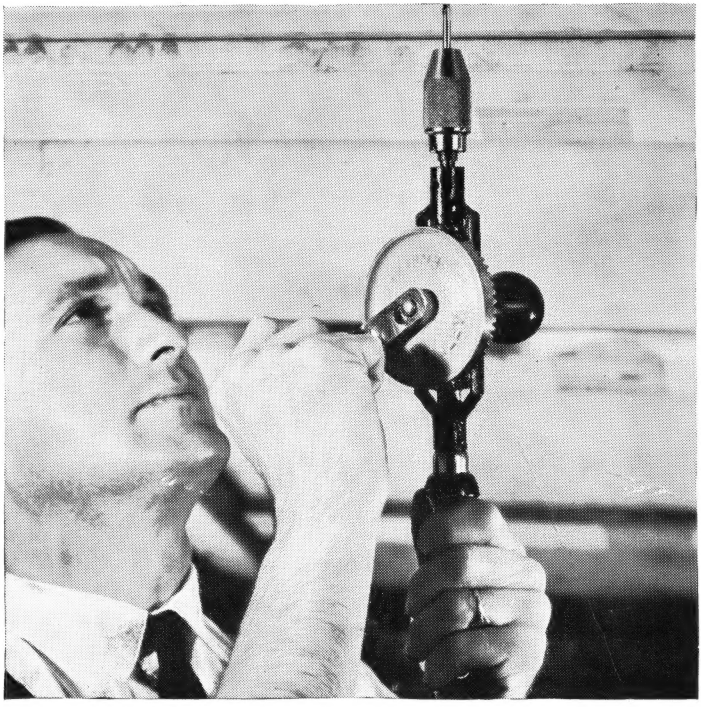

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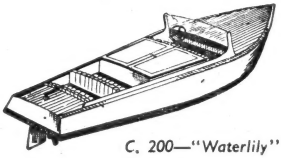

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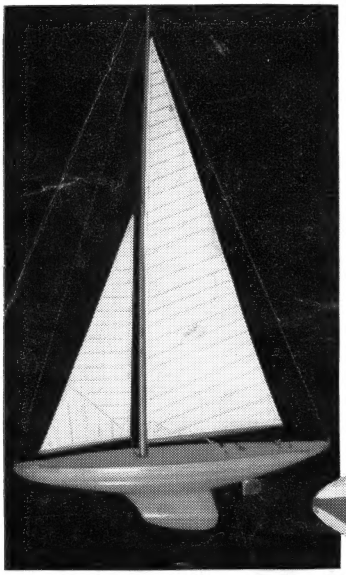

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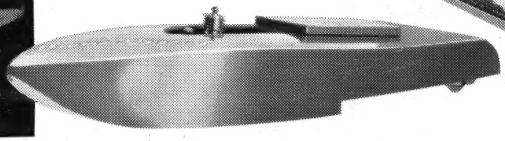

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Printed in Great Britain for the Proprietors by ELECTRICAL PRESS LTD., Cordwallis Works, Maidenhead, Berks, and published by PERCIVAL MARSHALL & Co. LTD., 23, Great Queen Street, London, W.C.2.